



UNITED STATES PATENT AND TRADEMARK OFFICE

PK

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,646	05/20/2002	Vyacheslav D. Kats	CAS-004 CIP	4687

7590

01/09/2004

David P Gordon
Gordon & Jacobson
65 Woods End Road
Stamford, CT 06905

EXAMINER

GIBSON, RANDY W

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,646

Applicant(s)

KATS ET AL.

Examiner

Randy W. Gibson

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 9-29 is/are rejected.
- 7) ☐ Claim(s) 6 and 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on May 20, 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 5, 7, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kiewit (US # 4,107,626). Kiewit discloses a weighing apparatus including a first, second, third & fourth SAW transducers (23-26, 35-37), amplifiers (28, 29, 28a, 29a), processor means (30 & 31, 30a & 31a), anti-reflective structures (45, 45a), and an elastic means (11, 11a) which causes displacement between the first & second transducers (Fig. 4b).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2841

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiewit (US # 4,107,626) in view of Naito et al (US # 4,623,813) and Mishliborsky (US # 4,718,287). Kiewit discloses a weighing apparatus (Fig. 2) including a first SAW transducer (37), a second SAW transducer (36), an amplifier (28a), processor means (30a,31a), anti-reflective structures (45a), and an elastic means (11a) which causes displacement between the first & second transducers (Col. 2, lines 55-66). Kiewit discloses the claimed invention except for the hermetic seal for protecting the transducers. However, Naito et al teach that it is known to place a hermetically sealed bellows around SAW transducers for protection (Col. 7, lines 29-32); and Mishliborsky discloses a bellows structure (Fig. 5) for covering only the transducer on an elastic member, so it was known in the art how to cover a transducer on an elastic member such as the device of Kiewit without interfering with its movement. It would have been obvious to modify the device of Kiewit to include a hermitically sealed bellows around the SAW transducers in order to provide protection from the environment.

5. Claims 4 and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiewit in view of Naito et al and Mishliborsky as applied to claims 1-3 above, and further in view of Ebata (US # 4,249,418), Slobodnik et al (US # 4,489,289), and Inoue et al (US # 4,858,145). The aforementioned combination discloses the claimed invention except for the temperature sensor and phase shift means. It is well known that SAW devices are sensitive to changes in temperature - so much so that SAW devices are sometimes used as electronic thermometers as shown by the example of

Art Unit: 2841

Ebata. Slobodnik et al teach that it is known to use a SAW oscillator as a thermometer to provide a control signal to a phase shifter circuit placed in the output of another SAW oscillator circuit to compensate for temperature induced changes in the output in the other SAW oscillator.

The structure of the force sensing device disclosed by Kiewit is expressly designed to mechanically compensate for variations in frequency characteristics of the SAW oscillator circuits used as force sensors caused by temperature induced stress in the elastic element they are attached to. It is also known in the weighing art, as shown by the example of Inoue et al, to place a separate temperature sensor on a weighing device to produce a temperature signal which can be used to electronically correct a weight signal for temperature induced stress in the elastic member of the weight sensor. It would have been obvious to the ordinary practioner to use a temperature sensor in the device of Kiewit to improve accuracy, and would have been obvious to use the additional SAW oscillator and phase shift circuit of Slododink et al as the temperature compensator based on its art recognized suitability for its intended use. See *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988); and, *MPEP* §§ 2144.06 & 2144.07.

Double Patenting

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re*

Art Unit: 2841

Ockert, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 9-21 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-21 of prior U.S. Patent No. 5,910,547. This is a double patenting rejection. The applicant has expressly admitted that the claims are essentially the same. The only difference between claims 9-21 and issued claims 1-21 is "the correction of minor errors" in the claims.

Conclusion

7. Claims 6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy W. Gibson whose telephone number is (703) 308-1765. The examiner can normally be reached on Mon-Fri., 9-5.

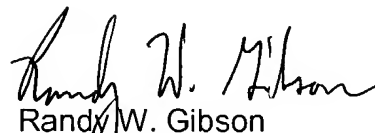
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S Martin can be reached on (703) 308-3121. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Application/Control Number: 10/030,646

Page 6

Art Unit: 2841

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-5115.



Randy W. Gibson
Primary Examiner
Art Unit 2841